

# **County of San Diego** Planning & Development Services **BUILDING DIVISION**

### ACCESSIBILITY CORRECTION LIST

**Public Accommodations** & Commercial Buildings

**Stairways** 

	RECORD ID: OV	OWNER ON APPLICATION:
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#### **GENERAL REQUIREMENTS**

Interior and exterior stairways shall comply with this correction list.

Exception: In alterations, stairs between levels connected by an accessible route, except striping per item 6 and handrails per items 10 through 18 shall be provided at altered stairs

Exception: Aisle stairs in assembly areas, except striping shall be provided per item 6

CBC 11B-210.1

Provide dimensions and coordinated detailing for each stairway.

CBC 11B-504

#### **WIDTH**

Dimension minimum 48-inch clear width between handrails at exit stairways serving as accessible means of egress per CBC 1007.

Exception: Stairways in buildings equipped with automatic sprinkler system

Exception: Stairways accessed from horizontal exit

CBC 1007.3 and CBC 1007.7.6

#### TREADS AND RISERS

- Detail stair treads and risers complying with the following:
  - Minimum 11-inch tread depth
  - Minimum 4-inch and maximum 7-inch riser height
  - Maximum 2.1% tread slope
  - ☐ Uniform tread width and riser height on each stairway flight
  - Slip-resistant treads
  - Open risers prohibited

Exception: On exterior stairways, maximum 1/2-inch opening allowed between base of riser and tread Exception: On exterior stairways, risers constructed of grating allowed with maximum 1/2-inch openings

CBC 11B-504.2, CBC 11B-504.3, and CBC 11B-504.4

- Detail tread nosings complying with the following per CBC Figure 11B-504.5:
  - Maximum 1-1/4-inch projection over tread below

Exception: Existing nosing projections of maximum 1-1/2 inches constructed in compliance with applicable code need not be altered retroactively

- Maximum 1/2-inch radius of curvature
- Risers vertical or sloped from underside of leading edge of tread above at maximum 30-degree angle from vertical
- Rounded or beveled where projecting beyond risers

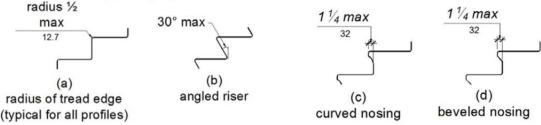


FIGURE 11B-504.5 STAIR NOSINGS

CBC 11B-504.5

THIS DOCUMENT IS FOR PLAN REVIEW ONLY.

CORRECTION LIST ITEMS AND FIGURES MAY NOT BE REPRODUCED OR COPIED ON PLANS. IF CONFLICTS EXIST BETWEEN CODE TEXT AND FIGURES, THE CODE TEXT SHALL GOVERN.

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Detail visually contrasting stair striping complying with the following: At upper approach and lowest tread of interior stairs At upper approach and all treads of exterior stairs Extending full width of approaches and treads Minimum 2-inches and maximum 4-inches wide Placed parallel to and within 1 inch of nosing edges of approaches and treads Slip-resistant Grooves shall not be used to satisfy striping requirements CBC 11B-504.4.1 **HAZARDS** Specify means of preventing accumulation of water on stairway treads and landings subject to wet conditions. CBC 11B-504.7 At stairway flights or landings with an adjacent vertical drop exceeding 30 inches within 36 inches horizontally, detail continuous guard minimum 42-inches high with openings not allowing passage of 4-inch-diameter sphere. Exception: Openings not allowing passage of 4 3/8-inch-diameter sphere allowed in portions of guard 36 inches to 42 inches high Exception: Triangular openings not allowing passage of 6-inch-diameter sphere allowed between riser, tread, and bottom rail CBC 1013.2, CBC 1013.3, and CBC 1013.4 Where pedestrian ways adjoin areas beneath stairs with less than 80-inch vertical clearance, detail cane-detectable barrier maximum 27 inches above walking surface. CBC 11B-307.4 HANDRAILS AND EXTENSIONS 10. Provide handrail on each side of each stair flight. CBC 11B-505.2 11. Dimension top of handrail gripping surface at consistent height, minimum 34 inches and maximum 38 inches above stair nosings per CBC Figure 11B-505.4(a). stairs FIGURE 11B-505.4 HANDRAIL HEIGHT CBC 11B-505.4 12. Provide continuous handrails the full length of each stair flight. Exception: Handrails not required to be continuous in assembly areas adjacent to seating or within aisle width CBC 11B-505.3 13. Provide continuous inner handrails between stair flights at dogleg or switchback stairs. CBC 11B-505.3 **14.** Detail extensions for each handrail complying with the following: ☐ Extending horizontally minimum 12 inches above top stair landing beginning directly above first riser nosing per CBC Figure 11B-505.10.2. ☐ Extending at slope of stair flight for horizontal distance equal to one tread depth beyond last riser nosing, then continuing horizontally for minimum 12 inches per CBC Figure 11B-505.10.3 Exception: Extensions not required for continuous inner handrails at dogleg or switchback stairs **Exception:** Extensions not required at discontinuous handrails serving assembly seating areas ■ Extending in same direction as stair flight Returning to a wall, guard, or landing surface, or otherwise continuous to handrail of adjacent stair flight □ Not protruding into required width of any adjacent route of travel

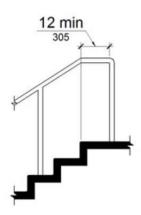


FIGURE 11B-505.10.2 TOP HANDRAIL EXTENSION AT STAIRS

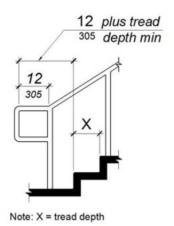


FIGURE 11B-505.10.3 **BOTTOM HANDRAIL EXTENSION AT STAIRS** 

CBC 1003.3 and CBC 11B-505.10

15. Where handrail extensions protrude more than 4-1/2 inches into an adjacent route of travel, detail cane-detectable rail at maximum 27 inches above landing surface.

CBC 11B-307.2

- **16.** Detail handrail gripping surfaces complying with the following:
  - ☐ If cross section is circular, minimum 1-1/4-inch and maximum 2-inch outside diameter per CBC Figure 11B-505.7.2(a)
  - If cross section is non-circular, minimum 4-inch and maximum 6-1/4-inch perimeter and maximum 2-1/4-inch cross-section dimension per CBC Figure 11B-505.7.2(b)
  - ☐ Continuous along length of handrail
  - Unobstructed on tops or sides
  - ☐ Not obstructed on bottoms more than 20% of handrail length
  - ☐ Any horizontal projections minimum 1-1/2 inches below handrail gripping surface per CBC Figure 11B-505.6
  - Rounded edges
  - No sharp or abrasive elements or adjacent surfaces
  - No handrail rotation within fittings

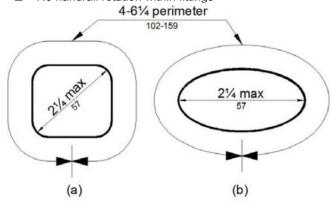


FIGURE 11B-505.7.2 HANDRAIL NON-CIRCULAR CROSS SECTION

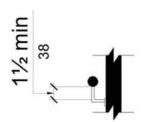


FIGURE 11B-505.6 HORIZONTAL PROJECTIONS BELOW GRIPPING SURFACE CBC 11B-505.6, CBC 11B-505.7, CBC 11B-505.8, CBC 11B-505.9

17. Detail minimum 1½-inch clearance between handrail gripping surface and adjacent surfaces per CBC Figure 11B-505.5.

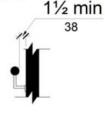


FIGURE 11B-505.5 HANDRAIL CLEARANCE

CBC 11B-505.5

18.	For handrails located in recesses, detail recess complying with the following:  Maximum 3-inches deep	
	☐ Extending minimum 18 inches above top of handrail	CBC 11B-505.5
AR	EAS OF REFUGE	
19.	Identify on plans an area of refuge at each exit stairway and interior exit access stairway provided as an accegress per CBC 1007.  Exception: Stairways in buildings and facilities equipped with automatic sprinkler system  Exception: Stairways accessed from horizontal exit  Exception: Stairways serving open parking garages  Exception: Stairways in smoke-protected seating areas	essible means of
	Exception: Stairways in R-2 occupancies	CDC 1007 3
		CBC 1007.3
20.	Locate and dimension each area of refuge to comply with the following:  □ Location on accessible route from space served  □ Maximum travel distance from space served per CBC 1016  □ Accommodates one wheelchair space for every 200 occupants served, but not fewer than two wheelchair space  □ Each wheelchair space minimum 30-inches by 48-inches with no door encroachment  □ Access to any wheelchair space not obstructed by more than one adjoining wheelchair space  □ Wheelchair spaces do not reduce required egress width	
	CBC 1007.6	and CBC 1009.5
21.	Detail smoke barrier per CBC 710 or horizontal exit per CBC 1025 between each area of refuge and remainder of <b>Exception</b> : Areas of refuge located within an enclosure for exit access stairways or interior exit stairways	story.
		CBC 1007.6.2
22.	Specify two-way communication system complying with the following between each area of refuge and central cor If central control point not constantly attended, controlled-access public telephone provided within area of refu Communication system with both audible and visible signals  Accessible button provided within area of refuge activating lights in both area of rescue and control point indicate been requested	ige
	☐ Button provided at control point activating lights in both area of rescue and control point indicating request has	s been received and CBC 1007.8.1
23.	Specify instructions displayed per items 31 through 34 within each area of refuge including the following for use conditions:  □ Directions to locate other means of egress □ Advising persons able to use stairway to do so as soon as possible, unless they are assisting others □ Information on planned availability of assistance in use of stairs and how to summon such assistance □ Directions for use of two-way communications system	under emergency
		and CBC 1007.8.2
24.	Provide signage per items 31 through 34 stating "AREA OF REFUGE" at door accessing area of refuge.	CBC 1007.9
EX <sup>-</sup>	TERIOR AREAS FOR ASSISTED RESCUE	
25.	Identify on plans an exterior area for assisted rescue at each exterior exit stairway serving as accessible means of 1007.	f egress per CBC
		CBC 1007.7
26.	Each exterior area for assisted rescue shall comply with the following:  Location on accessible route from space served  Minimum 50% open to outside air  Accommodates one wheelchair space for every 200 occupants served, but not fewer than two wheelchair space  Each wheelchair space minimum 30-inches by 48-inches with no door encroachment  Access to any wheelchair space not obstructed by more than one adjoining wheelchair space  Wheelchair spaces do not reduce required egress width	ices

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CBC 1007.6.1, CBC 1007.7, and CBC 1009.5

27.		Exception: Equivalent fire-rated construction extending out perpendicular to exterior wall minimum 4 feet at landing side		
		Minimum 3/4-hour-rated openings within fi	ire-rated separation construction	
			·	CBC 1007.7.4
28.	Prov	vide signage per items 31 through 34 statin	ng "EXTERIOR AREA FOR ASSIS	TED RESCUE" at door accessing area of refuge.  CBC 1007.9
SIG	NAG	GE .		
29.		Sign dimensions Character and symbol dimensions Character, symbol, and background colors Braille dimensions		schedule and/or details indicating the following:
		Sign mounting location		CBC 11B-703.1.1.1
30.			nore stories in height, provide floor	identification signs complying with the following in
		ch enclosed stairway:  Located at landing at each floor level		
		Placed adjacent to door on latch side Located with clear floor space minimum 1 door swing between closed and 45-degree		on tactile characters – provided beyond arc of any
		Mounted per the following:  Minimum 48 inches from finish floor o  Maximum 60 inches from finish floor o  At exit discharge level, includes raised five same height as raised characters	or ground surface to baseline of hi	
		Visual characters contrasting with background Pictograms and raised characters designated Corresponding Braille per item 34 provider	ating floor level per items 32 and 3	characters
				CBC 1022.8, CBC 11B-504.8, and CBC 11B-703
31.	11B	3-703.3 need not comply with case, style, for Characters and background with non-glare	CBC 11B-703.2 raised character re ont proportion, height, or spacing p e finish	equirements and accompanied by Braille per CBC rovisions
		Text shall be in a horizontal format		
		Line spacing between baselines of separa Characters shall be uppercase or lowercase		ercent and maximum 170 percent character height
		Characters shall be conventional in form –		nly decorate, or of other unusual form
				imum 110 percent uppercase letter "I" height and maximum 20 percent character height
		Characters spaced with closest points of a	adjacent character minimum 10 pe	rcent and maximum 35 percent of character height
		Character height sized according to follow	ving table and based on uppercase TABLE 11B-703.5.5 VISUAL CHARACTER HEIGH	
		HEIGHT TO FINISH FLOOR OR		

HEIGHT TO FINISH FLOOR OR GROUND FROM BASELINE OF CHARACTER	HORIZONTAL VIEWING DISTANCE	MINIMUM CHARACTER HEIGHT
40 inches (1016 mm)	less than 72 inches (1829 mm)	<sup>5</sup> / <sub>8</sub> inch (15.9 mm)
to less than or equal to 70 inches (1778 mm)	72 inches (1829 mm) and greater	$^{5}/_{8}$ inch (15.9 mm), plus $^{1}/_{8}$ inch (3.2 mm) per foot (305 mm) of viewing distance above 72 inches (1829 mm)
Greater than 70 inches (1778 mm)	less than 180 inches (4572 mm)	2 inches (51 mm)
to less than or equal to 120 inches (3048 mm)	180 inches (4572 mm) and greater	2 inches (51 mm), plus ${}^{1}/_{8}$ inch (3.2 mm) per foot (305 mm) of viewing distance above 180 inches (4572 mm)
greater than 120 inches (3048 mm)	less than 21 feet (6401 mm)	3 inches (76 mm)
	21 feet (6401 mm) and greater	3 inches (76 mm), plus $^{1}/_{8}$ inch (3.2 mm) per foot (305 mm) of viewing distance above 21 feet (6401 mm)

CBC 11B-703.5

32.	Pic	Characters and Braille not within pictogram field Pictograms and field with non-glare finish Pictograms contrasting with field, either light pictogram on dark field or dark pictogram on light field Include text descriptors complying with raised character, Braille, and mounting height provisions of CBC 11B-703	BC 11B-703.6
33.	Rai	characters on signage shall comply with the following: Characters minimum 5/8-inch and maximum 2-inches high based on height of uppercase letter "I" Characters raised minimum 1/32 inch Text in horizontal format Characters sans serif and uppercase Width of uppercase letter "O" minimum 60 percent and maximum 110 percent height of uppercase letter "I" Stroke thickness of uppercase letter "I" maximum 15 percent height of character Spacing between individual raised characters per the following:  Where characters have rectangular cross sections, minimum 1/8 inch and maximum 4 times raised character Where characters have non-rectangular cross sections, minimum 1/16 inch and maximum 4 times raised character sections	aracter stroke top of cross
		Spacing between baselines of separate lines of raised characters of minimum 135% and maximum 170% of raise height	ed character
		Characters separated minimum 3/8 inch from raised borders and decorative elements  Ci	BC 11B-703.2
34.		aille on signage shall comply with the following:  Contracted (Grade 2)	
		Braille flush left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum ½ inch below raised characters or symbols are left or centered and placed minimum 3/8 inch and maximum	ols
		When raised characters are multilined text, all Braille placed together below all raised text lines  Dots domed or rounded with dimensions per CBC Table 11B-703.3.1 and CBC Figure 11B-703.3.1	

#### TABLE 11B-703.3.1 BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6 mm)
Distance between two dots in the same cell <sup>1</sup>	0.100 (2.5 mm)
Distance between corresponding dots in adjacent cells <sup>1</sup>	0.300 (7.6 mm)
Dot height	0.025 (0.6 mm) to 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below <sup>1</sup>	0.395 (10 mm) to 0.400 (10.2 mm)

## 1. Measured center to center.

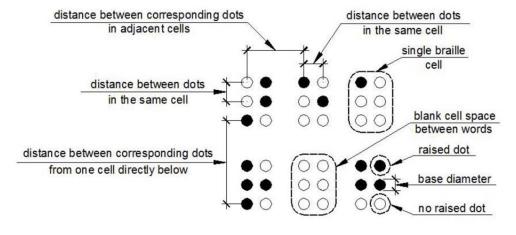


FIGURE 11B-703.3.1 BRAILLE MEASUREMENT

CBC 11B-703.3